REMARKS

Applicant would like to tank the Examiner for the thorough examination of the application for a patent.

a. Regarding the communication with TRW, the first communication was in October 26, 1997.

b. The communication was in reference to "Airbag deployment force control system." The original parent application serial number 08/953,503 filed October 17, 1997, which claimed priority from provisional application serial number 60/052,435, was communicated to TRW to "Charles E. Steffens, Director of systems application engineering and technology management."

c. There has not been any further improvement to this application as originally filed since the original communication.

d. Yes, the first communication was made in October 26, 1997.

e. There was a continuation in part; Serial Number 09/692,096 filed October 20, 2000, now abandoned. Application serial number 09/692,097 was filed in October 20, 2000, now U.S Patent number 6,728,616 and U.S. patent number 7,426,429.

f. No.

g. The EPROM as presented is by way of example and is not intended to be limited in scope of the disclosure. Further disclosure of the embodiments may include PROM, SRAM, EEPROM and/or EPROM emulator comprising a housing operatively connected to the EPROM header which is communicatively connected to a circuit board in conjunction with a microprocessor emulator. The housing further comprises data select circuits being configured to hold the occupants weight data. A switch on the housing is being turned to place the device in programming mode. Further embodiments of the switch comprise means for determining how the device is programmed by accessing the appropriate data lines for the EPROM memory which are being emulated. In certain embodiments, the emulator is programmed by sending the data through the EPROM socket on the circuit board via the microprocessor emulator. Some disclosure of the emulator comprises a programming mode in communication with the switch to place the device in read-only mode to simulate the EPROM.

h. The range of motion of the sliding port is calibrated per contraction of the accelerometer spring. The range of motion would vary per design specification and the extent of the range of motion would depend on the particular design specification.

i. The best understanding of the range of motion, by way of example only and not intended to be limited in scope, would be proper to envision the control panel for a conventional electronic control board for a lathe machine. A simple task when entered, prompts the machine to do extended range motion.

j. The first waiver of confidentiality was in September 1998.

k. The subject matters were in the original application and not claimed. Instead, because the office has not warded a patent to the merits of the original application, applicant removed some parts of the invention "Pressurized seat" from the specification as originally filed.

ARGUMENTS

The following remarks are respectfully submitted in response to the Office Action dated June 10, 2009. Claims 65-89, 93-95 and 102-110 are pending in the present application. Claims 102-103 have been cancelled in the application. Claims65-84, 89, and 104-110 have been amended to more particularly point out to the invention. Applicant respectfully submits that no new matter has been added to the application. Support for the claim amendments may be found in the specification.

Applicant would like to thank Examiner Barry J. Gooden for particularly for the thorough examination of the application. Applicant respectfully submits that the amendments made in regards to this Office Communication has summarized the claimed invention and has also distinguished the invention over the prior arts cited in the Office Communication dated June 10, 2009.
Claims 70, 104, 105, and 106 are objected to under 37 CFR 1.75© as being of improper dependent form. Applicant has amended the claims and put the claimed invention in a proper dependent form. Reconsideration is respectfully requested.
Claims 65-67 and 72 are objected to because of some informalities. All the informalities have been respectfully corrected. Reconsideration is respectfully requested.
Claims 65-89 93-95 and 104-110 stand rejection under 35 U.S.C. 112 first paragraph as failing to comply with the enablement requirement.
Applicant has amended claims 65-89, 93-95 and 104-110 to the understanding of one skilled in the art and as described in the specification. Elements in the specification are presented by way of example and are not intended to be limited in scope of the disclosure. Reconsideration is respectfully requested.
Claims 65-89 and 93-95 stand rejection under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the claims stand rejection because of indefinite functional and operational language. Claim 65 has been amended to provide sufficient antecedent basis. Claims 65-89 and 93-95 have been further amended to provide definite functional and operational language. Accordingly, applicant respectfully requests withdrawal of the rejections of claims 65-89 and 93-95 under 35 U.S.C 112, second paragraph.

Claims 65-89, 93-95 and 104-110 stand rejection under 35 U.S.C. 103(a) as being unpatentable over Steffens, Jr. et al., in view of Turner et al., and Mehney et al.

In particular, the office action suggests that Steffens et al. discloses all of the claimed elements of 65-89, 93-95 and 104-110, including a supplemental restraint system for a vehicle, comprising:

a weight –sensing unit operatively secured beneath at least one seat in said vehicle; a computerized system communicatively connecting said unit to a supplemental restraint system installed in said vehicle, said supplemental restraint system comprising at least one airbag system each having at least one airbag, each said airbag system corresponding to one of said at least one seat;

said weight-sensing unit being configured for taking weight measurements, converting said weight measurements into one or more electrical signals, and communicating said electrical signals to said computerized system;

said computerized system being programmably configured to calculate an operating weight value from said electrical signals corresponding to said weight measurements for each said seat and to communicate said operating weight value to said airbag system corresponding to said seat;

and for mechanically adjusting a deployment unit within said airbag system to deploy said at least one airbag with a deployment force and acceleration for airbag inflation that are proportionate to said weight measurements.

Independent claim 65, as amended recites "A vehicle occupant seat detection means and weight responsive classification system for a supplemental restraint system of a vehicle; comprising:

at least one weight sensing unit being operatively secured between a seat mounting structure means and the floor means of a vehicle;

a computerized system communicatively connecting said weight sensing unit to a supplemental restraint system installed in said vehicle, said supplemental restraint system comprising at least one airbag system each said at least one airbag system having at least one airbag, each said airbag system corresponding to said one of said at least one seat;

said at least one weight sensing unit being configured for taking weight measurements of at least one seated occupant in said at least one seat, and comprising means for converting said weight measurements into one or more electrical signals, and communicating said electrical signals to said computerized system;

said computerized system programmably configured to calculate an operating weight value from said electrical signals corresponding to said weight measurements for each said at least one seated occupant and to communicate said operating weight value to said airbag system corresponding to said one of said at least one seat;

each said airbag system being operatively configured with at least an accelerometer, said accelerometer comprises at least a coil being electronically configured for receiving said operating weight value for said seat and for adjusting a deployment unit within said airbag system to deploy said at least one airbag with a deployment force and acceleration for airbag inflation that are proportionate to said weight measurements;

said computerized system further comprises at least an erasable programmable read only memory "EPROM" operatively configured for monitoring the weight of at least a seated occupant and for correcting the weight of at least a changing occupant; and

said weight sensing unit responsive to the actual weight of a seated occupant, wherein said airbag system is rendered of sufficient deployment force and acceleration for said airbag inflation to keep said seated occupant on the seat when a collision is sensed, but is not rendered of sufficient deployment force and acceleration for said airbag inflation to cause impact injury to the occupant."

Independent claim 65, as amended, recites "the weight sensing unit being operatively secured between the seat mounting structure and the floor means of the vehicle." Independent claim 65, as amended, recites "each said airbag system being operatively configured with at least an accelerometer, said accelerometer comprises at least a coil being electronically configured for receiving said operating weight value." Steffens et al., teaches "an apparatus for controlling an occupant restraint system, said apparatus comprising:

A weight sensing means for sensing weight of the occupant; a regulating means operatively connected to an occupant restraining device of the occupant restrain system for regulating functions of said occupant restraining device in response to a control signal; and a control means operatively connected to said position sensing means, to said weight sensing means, and to said regulating means and including (i) means for determining in which of the plurality of discrete occupant weight ranges the occupant's weight falls, and (ii) means for determining in which of a plurality discrete occupant position ranges the occupant's sensed position falls, said control means selecting one of a discrete control zones dependant upon both said determined discrete occupant position range and said determined occupant weight range of the occupant and providing said control signal based on the selected one of said discrete control zones." The teaching of Steffens et al., even if taken with the combination of Turner et al, which recites "a neutral network integrated circuit (IC) having a primary architecture, comprising:

a data memory, an output eight memory, a processing circuit that computes an intermediate value that is a function of the content of said data and input weight memories, the contents of the input weight memories and the PEs' output value from a previous circle, and an activation circuit that maps the intermediate value into said output value in accordance with a desired activation function;

an output memory for storing said output value so that said stored output values are accessible to each PE's processing circuit at the next computational circle; a data bus for writing input into the data memory; a timing circuit that is enabled when data is written into said memories, counts a fixed amount of time per subcycle, and output an interrupt when p + 1 subcycles have been completed; and an output circuits that reads out L of said PES' output values in response to said interrupt, the input and output memories being programmed with arrays of respective input and output weights configuring the PEs to include and compute in p + 1 computational subcycles p hidden layers that extract features from the input data, and an output layer that weights the respective feature." The combination failed to teach the limitations of the present invention. Mehney et al., teachings are constructed on a deflectable mounting structure which covers the bottom portion (32) of the frame (30). This teaching as recited in the invention, discloses "Apparatus, comprising:

a vehicle seat frame; a plurality of deflectable mounting structures which together bare the entire weight of said frame; a plurality of vehicle occupant weight sensor assemblies, each of said weight sensor assemblies comprising a strain gauge mounted on a corresponding one of said deflectable mounting structures; and a vehicle occupant protection device responsive to said weight sensor assemblies." Though the application of Mehney et al. as a whole was filed in Jan 9, 1998, and has no earlier parent application, fails to teach the limitation of the present invention. Accordingly, the teachings of Steffens et al., Turner et al., and Mehney et al., taken in any combinations, have failed to teach the limitations of the amended independent claim 65. Additionally. The deflectable mounting structure would not bare the entire weight because the sensors as mounted are not in full communications with the weight due to the deflection. Accordingly, there could not have been any motivation to modify the teachings of Mehney et al. to overcome prior art matters because the parent application of the present invention, U.S. patent serial number 08/953,503 filed October 17,1997, discloses weight sensing unit disposed between the seat mounting structure and the floor means of the vehicle and further teaches all the limitations of Mehney et al.

In view of the above amendments and remarks, Applicant respectfully submits that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested. In view of the foregoing communication, Applicant respectfully submit that the present application including claims 65-89, 93-95 and 104-110 is in condition for allowance, and such action is respectfully requested.

Applicant has submitted "Field of the invention," "Background of the invention," and "Summary of the invention." These are taken directly from the specification and the lines have been listed. Reconsideration is respectfully requested.

Respectfully

Joseph Tabe